ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

6930.27

5/13/88

SUBJ: STANDARD BUILDING DESIGNS FOR ELECTRONIC EQUIPMENT

1. PURPOSE. This order announces the issuance of standard building designs for electronic equipment (drawing series D-6252 through D-6257 and specifications FAA-C-2813 through FAA-C-2818) listed in appendixes 1 through 6. These standards include preengineered metal, concrete masonry, precast concrete, and fiberglass buildings for housing electronic equipment at unmanned facilities.

2. DISTRIBUTION. This order is distributed to the branch level in the Program Engineering Service, and to the division level in the Systems Engineering Service and Systems Maintenance Service in Washington headquarters; to branch level in the regional Airway Facilities divisions, and to the director level at the FAA Technical Center and the Mike Monroney Aeronautical Center.

3. BACKGROUND.

a. These standard building designs have been developed to provide shelters for electronic equipment. They may house a single facility, such as a glide slope, or a consolidation of facilities such as radar and communications.

b. The large sized building designs provide a nominal 46' X 26' X 10' shelter, either concrete masonry or preengineered. Both building designs provide two types of roof, either a gable or a flat roof. Both building designs include an engine generator room and a small telephone company demarcation room.

c. The medium sized building designs provide a nominal 31' X 19' X 10' shelter, either concrete masonry or preengineered metal. Both building designs provide two types of roof, either a gable or flat roof. A telephone company demarcation room is provided. There is space for batteries for standby power during a commercial power interruption. An auxillary engine generator receptacle is included for connecting a portable engine generator during an extended power outage.

d. There are two small sized building designs. The small precast concrete design provides a 10' X 14' X 10' shelter. This is similar to the Radio Communications Link Building design in specification FAA-C-2811. An auxillary engine generator receptacle is also included.

e. The smallest of the building designs is a 7' X 5'-6 X 9' prefabricated fiberglass shelter. There is space for batteries for standby power and an auxillary engine generator receptacle is included.

4. DEVIATION FROM STANDARDS. The regions are authorized to site adapt these standards to fulfill their equipment installation requirements. Deviations for site adaptation may include such changes as adjusting building dimensions to accommodate equipment layouts, relocating light fixtures to enhance illumination of work areas, and relocate air conditioners to obtain better airflow over equipment. The plot layout plans for the large size buildings depict an underground fuel storage tank. The fuel tank installation shall conform to the FAA standards, and additionally to local ordinances and building codes.

5. MODIFICATION TO STANDARDS. Suggestion for modifications or addition of details should be brought to the attention of the Manager, Facilities Integration Division, APS-100.

6. CORRECTION TO STANDARDS. Correction to the standards may be made by the Director, Program Engineering Service, without further regional or interservice coordination. These may include dimensional errors, misspellings, and modification, addition, or deletion of details.

7. DISTRIBUTION OF STANDARDS.

a. A reproducible copy of each drawing and floppy disks with the specifications are being forwarded to each region, Attention: Airway Facilities Division. Computer Aided Engineering Graphics (CAEG) tapes are being provided to regions with CAEG equipment. Mylars are being provided to regions without CAEG equipment. The specifications are prepared using WordPerfect, version 4.1 format.

b. Additional copies of drawings may be obtained from the Configuration Management Division, Attention: AES-410. Additional copies of the specifications may be obtained through normal channels from the DOT Warehouse, M-443.2.

James R. Etgen
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Service

APPENDIX 1

STANDARD FACILITY DESIGN
LARGE PRE-ENGINEERED METAL BUILDING
FOR ELECTRICAL EQUIPMENT

NUMBER	DATE	SPECIFICATION
FAA-C-2813	10/20/87	Construction of Large Pre-Engineered Building
		DRAWINGS
		Standard Facility Design Large Pre-Engineered Metal Building for Electronic Equipment.
D-6252-0	10/20/87	Title Sheet and Index
D-6252-1	10/20/87	Plot Layout and Details
D-6252-2	10/20/87	Foundation Plan and Sections
D-6252-2A	10/20/87	Plans, Elevations and Details (Sloped Roof)
D-6252-3A	10/20/87	Sections and Details (Sloped Roof)
D-6252-4A	10/20/87	Details (Sloped Roof)
D-6252-2B	10/20/87	Plans, Elevations and Details (Gable Roof)
D-6252-3B	10/20/87	Sections and Details (Gable Roof)
D-6252-4B	10/20/87	Section and Details (Gable Roof)
D-6252-5	10/20/87	HVAC Plans, Sections and Details
D-6252-6	10/20/87	Electrical Power and Lighting Plan and Schedules
D-6252-7	10/20/87	Grounding Plans, Single Line Diagram and Details

APPENDIX 2

STANDARD FACILITY DESIGN - LARGE CONCRETE MASONRY UNIT BUILDING FOR ELECTRONIC EQUIPMENT

NUMBER	DATE	SPECIFICATION
FAA-C-2814	10/20/87	Construction of Large CMU Building
		DRAWINGS
		Standard Facility Design Large Concrete Masonry Unit Building for Electronic Equipment
D-6253-0	10/20/87	Title Sheet and Index
D-6253-1	10/20/87	Plot Layout and Details
D-6253-2	10/20/87	Foundation Plan, Sections and Details
D-6253-3A	10/20/87	Plans, Elevations and Details (Sloped Roof)
D-6253-4A	10/20/87	Sections and Details (Sloped Roof)
D-6253-3B	10/20/87	Plans, Elevations and Details (Gable Roof)
D-6253-4B	10/20/87	Sections and Details (Gable Roof)
D-6253-4C	10/20/87	Roof Framing Plan, Sections and Details (Gable Roof)
D-6253-5	10/20/87	HVAC Plan, Section and Details
D-6253-6	10/20/87	Electrical Power and Lighting Plan and Schedules
D-6253-7	10/20/87	Grounding Plan, Single Line Diagram and Details

APPENDIX 3

STANDARD FACILITY DESIGN - MEDIUM PRE-ENGINEERED METAL BUILDING FOR ELECTRONIC EQUIPMENT

NUMBER	DATE	SPECIFICATION
FAA-C-2815	10/20/87	Construction of Medium Pre-Engineered Building
		DRAWINGS
		Standard Facility Design Medium Pre-Engineered Metal Building For Electronic Equipment
D-6254-0	10/20/87	Title Sheet and Index
D-6254-1	10/20/87	Plot Layout and Details
D-6254-2	10/20/87	Foundation Plan and Section
D-6254-2A	10/20/87	Plans, Elevations and Details (Sloped Roof)
D-6254-3A	10/20/87	Sections and Details (Sloped Roof)
D-6254-2B	10/20/87	Plans Elevations and Details (Gable Roof)
D-6254-3B	10/20/87	Sections and Details (Gable Roof)
D-6254-4	10/20/87	HVAC Plan, Sections and Details
D-6254-5	10/20/87	Electrical Power and Lighting Plan and Schedules.
D-6254-6	10/20/87	Electrical Grounding Plan and Details

APPENDIX 4

STANDARD FACILITY DESIGN - MEDIUM CONCRETE MASONRY UNIT BUILDING FOR ELECTRONIC EQUIPMENT

NUMBER	DATE	SPECIFICATION
FAA-C-2816	10/20/87	Construction of Medium CMU Building
		DRAWINGS
		Standard Facility Design-Medium Concrete Masonry Unit Building for Electronic Equipment
D-6255-0	10/20/87	Title Sheet and Index
D-6255-1	10/20/87	Plot Layout and Details
D-6255-2	10/20/87	Foundation Plan, Section and Details
D-6255-2A	10/20/87	Plans, Elevations and Details (Sloped Roof)
D-6255-2B	10/20/87	Plans, Elevations and Details (Gable Roof)
D-6255-3A	10/20/87	Sections and Details (Sloped Roof)
D-6255-3B	10/20/87	Sections and Details (Gable Roof)
D-6255-3C	10/20/87	Roof Framing Plan, Sections and Details (Gable Roof)
D-6255-4	10/20/87	HVAC Plan, Sections and Details
D-6255-5	10/20/87	Electrical Power and Lighting Plan and Schedules
D-6255-6	10/20/87	Electrical Grounding Plan and Details

APPENDIX 5

STANDARD FACILITY DESIGN- SMALL PRECAST CONCRETE SHELTER FOR ELECTRONIC EQUIPMENT

NUMBER	DATE	SPECIFICATION
FAA-C-2817	10/20/87	Construction of Small Pre-Cast Concrete Building
		DRAWINGS
		Standard Building Design Small Precast Concrete Shelter for Electronic Equipment
D-6256-0	10/20/87	Title Sheet and Index
D-6256-1	10/20/87	Plot Layout and Fence Details
D-6256-2	10/20/87	Foundation Plans and Sections
D-6256-3	10/20/87	Floor Plan and Elevations
D-6256-4	10/20/87	HVAC Plan and Details
D-6256-5	10/20/87	Electrical Plans and Details

APPENDIX 6

STANDARD FACILITY DESIGN - SMALL FIBERGLASS SHELTER
FOR ELECTRONIC EQUIPMENT

NUMBER	DATE	SPECIFICATION
FAA-C-2818	10/20/87	Construction of Small Fiberglass Building
		DRAWING
		Standard Building Design Small Fiberglass Shelter for Electronic Equipment
D-6257-0	10/20/87	Title Sheet and Index
D-6257-1	10/20/87	Plot Layout and Fence Details
D-6257-2	10/20/87	Foundation Plans and Sections
D-6257-3	10/20/87	Floor Plan, Elevations and Details
D-6257-4	10/20/87	HVAC Plan and Details
D-6257-5	10/20/87	Electrical Plans and Details